UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/540,347	06/21/2005	Robert Fernand Bujeau	006593-2064	006593-2064 6408	
33375 THOMPSON I	7590 10/03/2007		EXAMINER ST CLAIR, ANDREW D		
Intellectual Pro					
P.O Box 8801 DAYTON, OH	I 45401-8801		ART UNIT PAPER NUMB		
,			3709		
			MAIL DATE	DELIVERY MODE	
			10/03/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

			<i>₩</i>			
1	•	Application No.	Applicant(s)			
Office Action Summary		10/540,347	BUJEAU ET AL.			
		Examiner	Art Unit			
		Andrew StClair	3709			
The MAILING DA	ATE of this communication app	ears on the cover sheet with the c	orrespondence address			
WHICHEVER IS LONG - Extensions of time may be available. after SIX (6) MONTHS from the second of the second	GER, FROM THE MAILING DA ailable under the provisions of 37 CFR 1.13 he mailing date of this communication. hed above, the maximum statutory period we for extended period for reply will, by statute, the later than three months after the mailing	'IS SET TO EXPIRE 3 MONTH(ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim 18 apply and will expire SIX (6) MONTHS from 18 cause the application to become ABANDONE 18 date of this communication, even if timely filed	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1) Responsive to co	mmunication(s) filed on	_•				
2a) ☐ This action is FIN	This action is FINAL . 2b)⊠ This action is non-final.					
closed in accorda	ance with the practice under E.	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims		•				
4a) Of the above 5) Claim(s) is 6) Claim(s) <u>1-5,9-25</u> 7) Claim(s) <u>6-8 and</u>	5 and 27 is/are rejected.					
Application Papers						
10)⊠ The drawing(s) file Applicant may not a Replacement draw	request that any objection to the oring sheet(s) including the correction	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is objection.	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. §	119					
a) All b) Some 1. Certified co 2. Certified co 3. Copies of t application	e * c) None of: pies of the priority documents pies of the priority documents he certified copies of the priori from the International Bureau	have been received in Application ty documents have been received	on No d in this National Stage			
Attachment(s) 1) Notice of References Cited 2) Notice of Draftsperson's Pa 3) Information Disclosure State Paper No(s)/Mail Date 6/21.	tent Drawing Review (PTO-948) ement(s) (PTO/SB/08)	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te			

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation of "the second temperature probe" lacks antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-5, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolvites (US 5,631,033) in view Creamer et al. (US 6,175,100).

With respect to claim 1, Kolvites discloses an oven for cooking food, the oven comprising an enclosure 10 for receiving the food to be heated and for containing a cooking atmosphere, the enclosure comprising two horizontal walls forming respectively a bottom wall and a top wall, interconnected by at least two vertical side walls, the enclosure being closed by at least one door 14 that is likewise vertical (see fig. 1), and communicating with the outside via an exhaust opening (see fig. 2, opening connected to drain tube 21) for exhausting gas inside the enclosure and at a pressure above atmospheric pressure; and a heater device 18 for heating the cooking atmosphere; the oven being characterized by the fact that it comprises a regulation chamber 11, filled at least in part with a liquid of volume adapted to vary between a high level and a low level (see fig. 2), the regulation chamber communicating with the enclosure via an air inlet 17; and an admission duct 33. Kolvites does not discloses the admission duct extending between a high end and a low end, the high end opening out outside the regulation chamber and the enclosure, and the low end being closed by the liquid when the level of the liquid corresponds substantially to its high level. Creamer et al. do disclose an admission duct 64 extending between a high end and a low end, the high end opening out outside the regulation chamber (via outlet 62, see fig. 1) and the enclosure, and the low end being closed by the liquid when the level of the liquid corresponds substantially to its high level (see fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the oven of Kolvites to have the admission duct of Creamer et al. because simple substitution of one known element for another would have yielded predictable results to one of ordinary skill in the

Art Unit: 3709

art at the time of the invention. (When claiming a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result. KSR International Co. v. Teleflex Inc., 550 U.S. _, (2007) (citing US v. Adams, 383 U.S. 39, 40 (1966)).

With respect to claim 2, Kolvites further discloses the claimed subject matter including an evacuation chamber 13 filled at least in part with a liquid of volume that is adapted to vary between a high level and a low level, said evacuation chamber communicating with the regulation chamber. (evacuation chamber 13 communicates with regulation chamber 11 via drain pipe 40.)

With respect to claim 3, Kolvites further discloses the claimed subject matter including an evacuation tube 21 extending between the exhaust opening and a high end opening out into the evacuation chamber above the high and low liquid levels. (evacuation tube 21 opens into the evacuation chamber above the water level via water seal tube 22).

With respect to claim 4, Kolvites further discloses the claimed subject matter including a chimney 30 extending between a first end communicating with the outside of the evacuation chamber and a second end coming over the high level of the liquid, said second end allowing gas under positive pressure to escape from the enclosure via the evacuation tube. (see fig. 2).

With respect to claim 5, Kolvites further discloses the claimed subject matter including a regulator (11, 13) itself comprising the regulation chamber 11 and the evacuation chamber 13, these two chambers constituting volumes that are separated from each other at least in part and that communicate with each other via a narrow passage 40 adapted to allow the liquid to flow between these two chambers.

Art Unit: 3709

With respect to claim 10, Kolvites further discloses the claimed subject matter including vapor-producing means suitable for delivering water vapor into the enclosure. (fig. 2 depicts vapor producing means 11, 33, 18 delivering water vapor into enclosure 10).

With respect to claim 12, Kolvites further discloses the claimed subject matter in which the exhaust opening opens out substantially in the lowest point of the bottom wall. (see fig. 2).

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kolvites (US 5,631,033) in view Creamer et al. (US 6,175,100) as applied to claim 1, in further view of Mangina et al. (EP 0388751).

With respect to claim 9, Kolvites in view of Creamer et al. disclose all of the claimed subject matter except a fan disposed inside the enclosure to stir the cooking atmosphere heated by the heater device, said fan creating a suction zone inside the enclosure the air inlet being situated substantially in the suction zone of the fan. Mangina et al. do disclose a fan 19 disposed inside the enclosure to stir the cooking atmosphere heated by the heater device, said fan creating a suction zone inside the enclosure the air inlet being situated substantially in the suction zone of the fan. (Abstract, paragraph 2). Mangina et al. further discloses motivation to combine. (Abstract, paragraph 2; to effect an "air exchange," providing a regulation of moisture content.) It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the oven of Kolvites in view of Creamer et al. for the purpose of regulating moisture content.)

7. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolvites (US 5,631,033) in view Creamer et al. (US 6,175,100) as applied to claim 1, in further view of Violi (US 5,552,578).

With respect to claim 11, Kolvites in view of Creamer et al. disclose all of the claimed subject matter except the exhaust opening being situated beneath the heater device. Violi disclose a heater device 27 situated above the exhaust opening 30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the oven Kolvites in view of Creamer et al. with the heater and exhaust configuration of Violi because substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art at the time of the invention. (When claiming a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result. *KSR International Co. v. Teleflex Inc.*, 550 U.S. _, (2007) (citing *US v. Adams*, 383 U.S. 39, 40 (1966)).

With respect to claim 13, Kolvites in view of Creamer et al. disclose all of the claimed subject matter except the exhaust opening communicating with a siphon adapted to evacuate liquids and condensates from the enclosure while preventing cold air from rising into the enclosure. Violi disclose a siphon 22 communicating with the exhaust opening to evacuate liquids and condensates from the enclosure while preventing cold air from rising into the enclosure. (see fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the oven of Kolvites in view of Creamer et al. with the siphon of Violi because all of the claimed elements were known in the prior art and one skilled in the art could have combined prior art elements according to known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. ("The combination of familiar elements

according to known methods is likely to be obvious when it does no more than yield predictable results." KSR International Co. v. Teleflex Inc., 550 U.S. _, (2007)).

8. Claims 14-17, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolvites (US 5,631,033) in view of Smith (US 5,619,983).

With respect to claim 14, Kolvites discloses an oven for cooking food, comprising an enclosure 10 for receiving the food to be heated and for containing a cooking atmosphere, this enclosure comprising two horizontal walls, respectively forming a bottom wall and a top wall, interconnected by at least two vertical side walls, this enclosure being closed by at least one door 14 which is also vertical (see fig. 1), and communicating with the outside by means of an evacuation aperture (connected to drain tube 21) for gases under positive pressure in the enclosure. Kolvites does not disclose a first temperature probe to measure the temperature of the gases issuing from the evacuation aperture. Smith does disclose a first temperature probe 62 to measure the temperature of the gases issuing from the evacuation aperture, as part of a humidity control system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the oven of Kolvites with the humidity control system of Smith because all of the claimed elements were known in the prior art and one skilled in the art could have combined prior art elements according to known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." KSR International Co. v. Teleflex Inc., 550 U.S., (2007)).

Art Unit: 3709

With respect to claim 15, Smith further discloses the humidity control system comprising calculating means of calculating the humidity rates in the oven as a function of the temperature measured at the first probe. (col. 6, ln. 39 - col. 7, ln. 49.; Smith discloses a microprocessor 60, utilizing a fifth degree polynomial to calculate the humidity rate as a function of temperature and water flow rate. Particularly, col. 7, ln. 14-36 describe the utilization of the first probe in this calculation.)

With respect to claim 16, Smith further discloses the humidity control system comprising a second temperature probe 64 to measure a reference temperature.

With respect to claim 17, Smith further discloses the humidity control system wherein the humidity rates in the oven is calculated by the calculating means as a function of the temperature measured at the first and second probes.

With respect to claim 27, Kolvites further discloses the oven comprising means for the production of steam, arranged to supply steam in the enclosure. (fig. 2 depicts steam producing means 11, 33, 18 delivering water vapor into enclosure 10).

9. Claims 18-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolvites (US 5,631,033) in view of Smith (US 5,619,983) as applied to claim 14 above, in further view of Mangina et al. (EP 0388751).

With respect to claim 18, Kolvites in view of Smith disclose all of the claimed subject matter except a heater for heating the cooking atmosphere, a fan, located in the interior of the enclosure, to stir the cooking atmosphere heated by the heater, this fan creating an area of low pressure in the enclosure, and an air inlet opening in the enclosure, approximately in said low-pressure area of the fan. Mangina et al. disclose a heater 21 for heating the cooking atmosphere,

Art Unit: 3709

a fan 19, located in the interior of the enclosure, to stir the cooking atmosphere heated by the heater, this fan creating an area of low pressure in the enclosure, and an air inlet opening 23 in the enclosure, approximately in said low-pressure area of the fan. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the oven of Kolvites in view of Smith with the heater and fan arrangement on Mangina et al. because all of the claimed elements were known in the prior art and one skilled in the art could have combined prior art elements according to known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." KSR International Co. v. Teleflex Inc., 550 U.S., (2007)).

With respect to claim 19, Kolvites further discloses the oven comprising a regulation chamber 11, at least partially filled with a liquid of which the volume is adjusted so as to vary between a high level and a low level, this regulation chamber communicating with the air inlet 17.

With respect to claim 21, comprising an evacuation chamber 13, at least partially filled with a liquid of volume adapted to vary between the high level and the low level, this evacuation chamber communicating with the regulation chamber. (evacuation chamber 13 communicates with regulation chamber 11 via drain pipe 40.)

With respect to claim 22, comprising a regulator box 12, itself comprising the regulation chamber 11 and the evacuation chamber 13, these two chambers constituting volumes which are

at least partially separated from one another, communicating between one another by means of a narrow passage 40, adapted to allow the liquid to flow between these two chambers.

With respect to claim 23, comprising an evacuation tube 21 extending between the evacuation aperture and a high end, opening into the evacuation chamber above the high and low levels of the liquid. (evacuation tube 21 opens into the evacuation chamber above the water level via water seal tube 22).

With respect to claim 24, comprising a chimney 30 extending between a first end communicating with the outside of the evacuation chamber and a second end coming over the high level of the liquid, this second end allowing the gases under positive pressure in the enclosure to escape via the evacuation tube. (see fig. 2).

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kolvites (US 5,631,033) in view of Smith (US 5,619,983) in view of Mangina et al. (EP 0388751) as applied to claim 19, in further view of Creamer et al. (US 6,175,100).

With respect to claim 20, Kolvites in view of Smith in view of Mangina does not disclose the regulation chamber comprising an admission duct which extends between a high end and a low end, the high end opening outside the regulation chamber and the enclosure, and the low end being covered by the liquid when the level of the liquid corresponds approximately to its high level. Creamer et al. do disclose an admission duct 64 extending between a high end and a low end, the high end opening out outside the regulation chamber (via outlet 62, see fig. 1) and the enclosure, and the low end being closed by the liquid when the level of the liquid corresponds substantially to its high level (see fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the oven of Kolvites in view of Smith in

view of Mangina to have the admission duct of Creamer et al. because simple substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art at the time of the invention. (When claiming a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result. *KSR International Co. v. Teleflex Inc.*, 550 U.S. _, (2007) (citing *US v. Adams*, 383 U.S. 39, 40 (1966)).

Allowable Subject Matter

- 11. Claims 6-8, and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 12. Claim 25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 13. The following is a statement of reasons for the indication of allowable subject matter:

Applicant recites an apparatus related to handling condensate and monitoring the humidity inside an oven. While much of the claimed subject matter could be found in the prior art, no reference could be found that contained both a comparable condensate system and a humidity monitoring system. Claims 6-8 and 25-26 interrelate the two elements by claiming temperature sensors of the humidity monitoring system disposed within certain aspects of the condensate handling system. Thus these claims are not found in the prior art and are not rendered obvious by the prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew StClair whose telephone number is 571-272-3700. The examiner can normally be reached on Monday through Thursday, 8-5 Eastern Standard Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrence Till can be reached on 571-272-1280. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ADS 9/28/07

Supervisory Patent Examiner